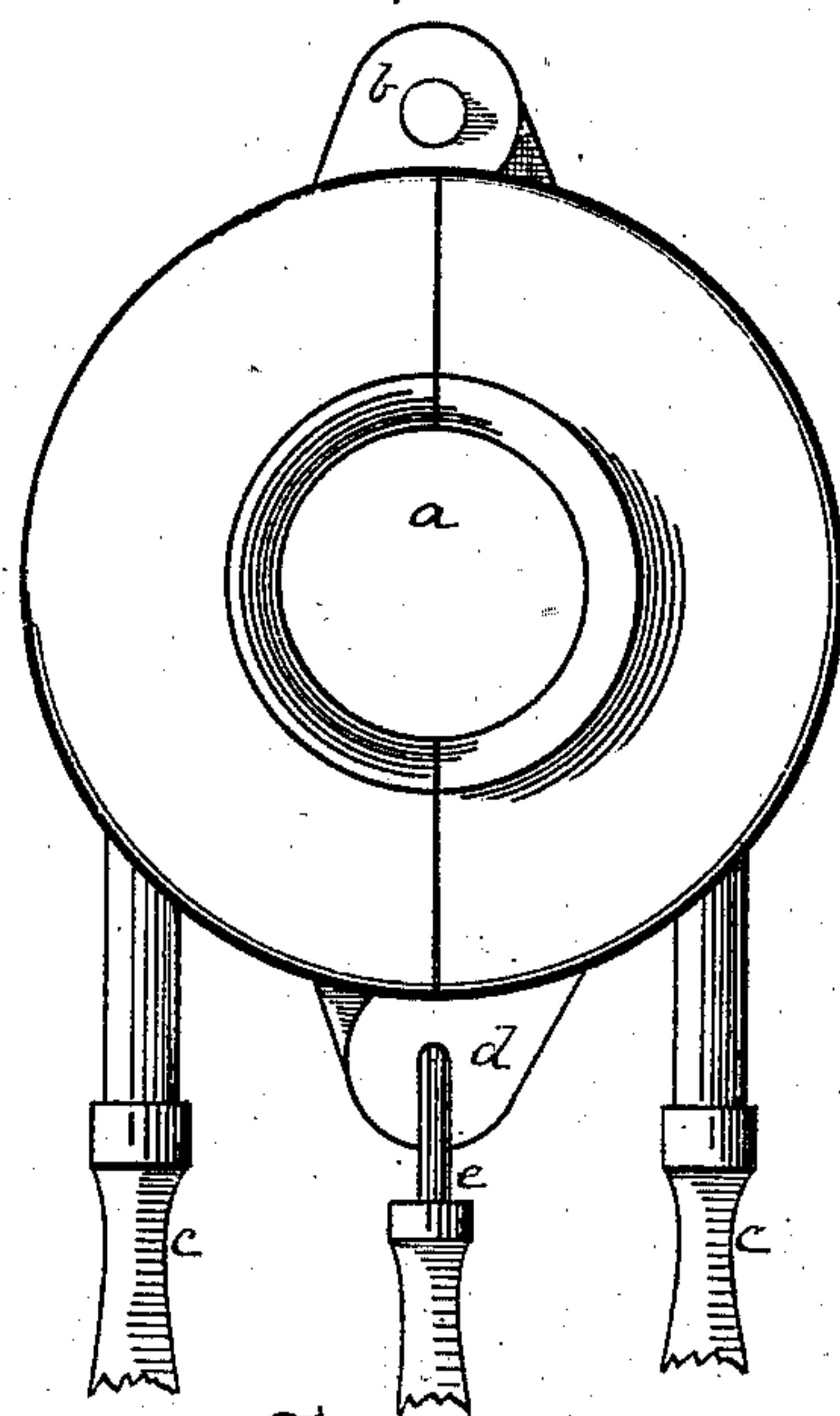
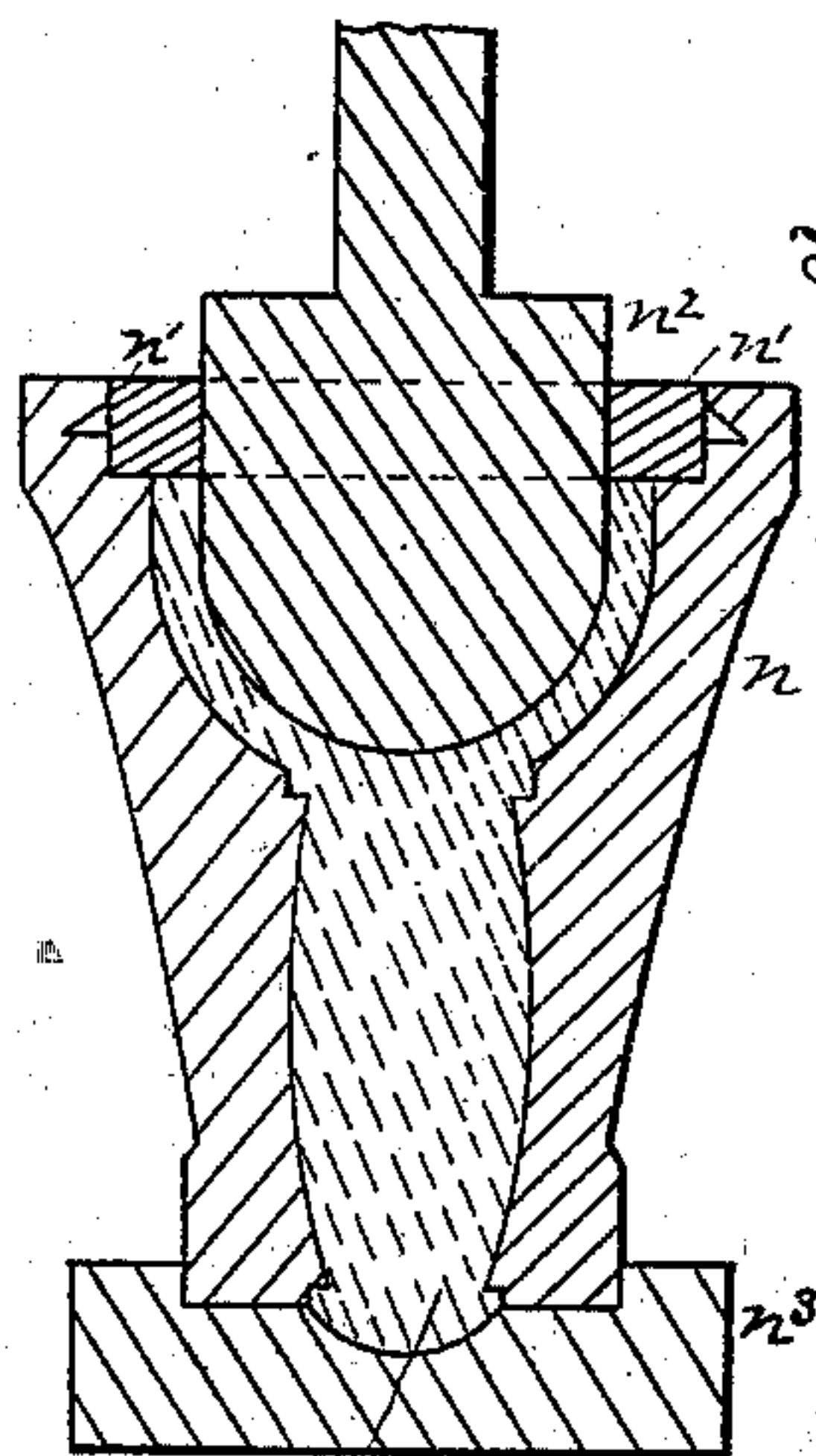
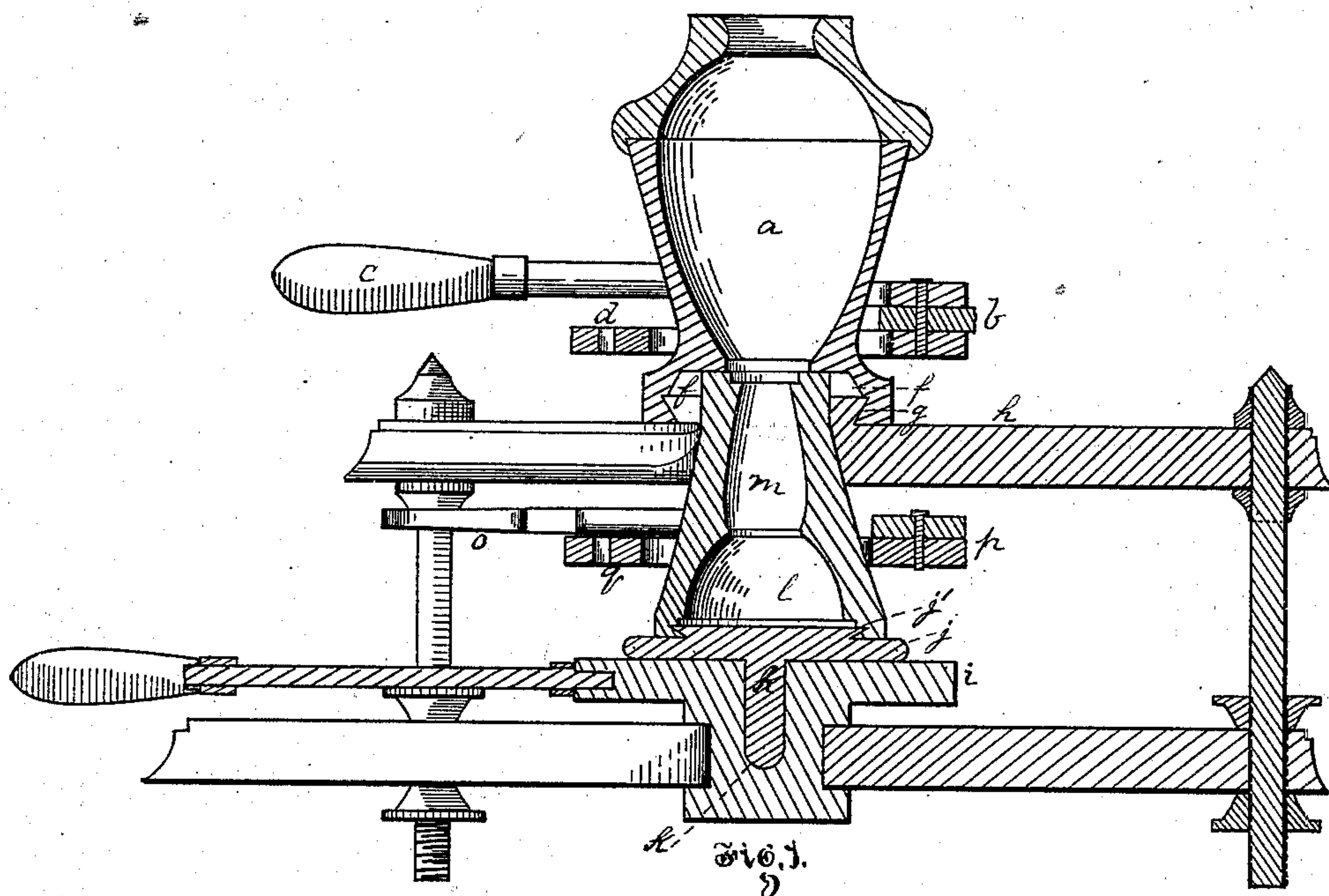


T. C. PEARS.
Manufacture of Glassware.

No. 224,555.

Patented Feb. 17, 1880.



Witnesses.
John K Smith
L. G. Fidler.

Inventor.
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UNITED STATES PATENT OFFICE.

THOMAS C. PEARS, OF PITTSBURG, PENNSYLVANIA.

MANUFACTURE OF GLASSWARE.

SPECIFICATION forming part of Letters Patent No. 224,555, dated February 17, 1880.

Application filed December 15, 1879.

To all whom it may concern:

Be it known that I, THOMAS C. PEARS, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Glassware; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of my improved apparatus. Fig. 2 is a like view of the foot-mold, and Fig. 3 is a plan view of the bowl-mold.

Like letters of reference indicate like parts in each.

My invention relates to the manufacture of articles of glassware having a solid or pressed foot, or foot and stem, and a seamless blown bowl.

Heretofore such articles have been made by pressing the foot or foot and stem, and then removing it from the mold, placing it under the bowl-mold with the peg projecting into such mold, blowing the bowl onto the peg, and rotating the bowl, and with it the foot and stem, at the time of blowing the same. An objection to this way of making the article is that the removal of the pressed foot or foot and stem from its mold, and its exposure to the air, chills it more or less, and prevents the formation of a perfect joint in some cases between the bowl and foot, and causes breakage and loss.

My invention is designed to remedy this; and it consists in blowing the bowl onto the stem or foot before the foot is removed from its mold.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction.

In the drawings, *a* indicates a sectional blow-mold for forming the bowl of the article, such mold being of any suitable interior configuration which will not interfere with the rotation of the article therein. This mold is provided with a hinge, *b*, handles *c*, and perforated lugs *d*, having a pin, *e*, to secure the parts together in a closed position. It is also provided with a beveled recess, *f*, in which fits a counterpart plate or projection, *g*, on the bed-plate *h*, where-

by the mold is suitably placed and properly centered for the attachment of the foot or foot and stem. Under the bed-plate *h* is a removable table, *i*, upon which is a disk or plate, *j*, capable of rotation, and having a spindle, *k*, and a projection, *j'*, similar to the projection *g*, for securing the mold thereon.

The foot and stem *l m* are pressed by the plunger *n* in a partible or other mold, *n*, and when pressed the ring *n'* and plate *n*³ are removed and the mold placed and secured firmly on the disk *j*. The mold *n* has handles *o*, a hinge, *p*, and perforated lugs *q*, by which the parts are fastened together.

The operation is as follows: The foot or foot and stem is first pressed, the ring *n'* and plate *n*³ removed, and the mold, with its contained foot or foot and stem, is placed on the disk *j*, the end of the stem *r* projecting slightly into the bowl-mold *a*. The blower then inserts the punty, with a gathering thereon, within the mold *a*, and proceeds to blow the bowl, rotating the glass back and forth within the mold, thus preventing the formation of mold marks or seams. As soon as the glass on the punty comes in contact with the end of the pressed foot, previously set in the mold, as before specified, union of the two will take place, and the foot, with its mold, being centered with the bowl-mold and free to rotate, the bowl may be finished without mold marks or seams or distortion in any manner.

The foot being pressed separately, any desired shape can be given to it, and if the desired shape is consistent therewith, it may be formed in a single mold, thus avoiding mold-marks on both foot and bowl.

Thus it will be seen that the foot or foot and stem, not being removed from the mold, will not be exposed to the cold air until the union with the bowl is effected; hence the loss arising from such exposure and from contact with the colder centering devices is overcome, and thereby a saving effected. I am also enabled to produce clearer and handsomer articles than by the other plan mentioned.

It is very evident that, instead of rotating the article and the foot-mold to produce a seamless bowl, the bowl-mold itself may be rotated and the article and foot-mold be still. In that case the rotating disk *j* may be dispensed with,

This invention is an improvement on and differs from the invention described in my Patent No. 179,951, of July 18, 1876, in that in the said patent the foot or stem is removed from its mold before the bowl is blown upon it, while in this case the bowl is blown on the foot or stem while the latter is still in its mold.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As an improvement in the manufacture of footed or footed and stemmed glassware wherein a pressed foot is united to a blown bowl, blowing the bowl upon the foot peg or stem while the foot is still contained within its mold, and causing the rotation of the foot and bowl relatively to the bowl-mold, or vice versa, while the bowl is being blown, substantially as and for the purposes described.

2. The combination of a blow-mold for forming the bowl and a foot-mold centered therewith, either of which is capable of rotation while the other is still, substantially as and for the purposes described.

3. The combination of a blow-mold for forming the bowl, a foot-mold centered therewith, and a disk or table, capable of rotation, sustaining the foot-mold, substantially as and for the purposes described.

In testimony whereof I, the said THOMAS C. PEARS, city, county, and State aforesaid, have hereunto set my hand.

THOMAS C. PEARS.

Witnesses:

JAMES H. PORTE,
J. K. SMITH.